

**METHOD AND APPARATUS FOR DEFENDING AGAINST  
SYN PACKET BANDWIDTH ATTACKS ON TCP SERVERS**

**Abstract of the Disclosure**

- 5           A SYN packet bandwidth Distributed Denial-of-Service (DDoS) attack is defended against by intercepting and identifying SYN packets in a “DDoS gateway” advantageously positioned at the edge of the network to be protected (*e.g.*, one hop upstream from the protected link), and by queuing these intercepted SYN packets in a separate queue from other TCP packet queues. Edge per-flow queuing is employed to
- 10   provide isolation among individual TCP connections sharing the link. A fair scheduling algorithm such as round robin scheduling is used to ensure that SYN packets (such as those generated as part of a SYN bandwidth attack) cannot overwhelm the egress link in the presence of other TCP packets.